



VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

The claims have been amended as follows.

1. (Twice Amended) A method of gene analysis by detecting hybridization between a probe nucleic acid and a sample nucleic acid comprising a target sequence complimentary to that of the probe nucleic acid, wherein at least one of the probe nucleic acid and the sample nucleic acid is DNA, said method comprising:

[immobilizing either the probe nucleic acid or the sample nucleic acid on a substrate,]
providing a substrate on which either the probe nucleic acid or the sample nucleic acid is
immobilized,

adding the other non-immobilized probe nucleic acid or non-immobilized sample nucleic acid [to the immobilized probe nucleic acid or sample nucleic acid] on the substrate, said other
non-immobilized probe nucleic acid or non-immobilized sample nucleic acid being labeled with
a fluorescent substance,

performing [promoting] hybridization of the probe nucleic acid and the sample nucleic
acid in the presence of a double-stranded DNA-binding protein having a function to stabilize a
complementary double-stranded DNA, [and]

detecting the hybridization of the probe nucleic acid and the sample nucleic acid from the
presence of said fluorescent substance, and

performing gene analysis based on the hybridization detected.

10. (Twice Amended) The method according to claim 1 [9], wherein the amount of the sample nucleic acid comprising the target sequence is analyzed based on the intensity of a hybridization signal obtained from the hybridization of the [labeled] sample nucleic acid and the probe nucleic acid, said hybridization signal being represented by the presence of said fluorescent substance after hybridization.

11. (Twice Amended) The method according to claim 1 [9], wherein the detection of the hybridization is performed by using a plurality of probe nucleic acids and detecting the polymorphism in the target sequence by comparing the intensity of each hybridization signal obtained from the hybridization of the [labeled] sample nucleic acid and the plurality of probe nucleic acids, said each hybridization signal being represented by the presence of said fluorescent substance after hybridization.

12. (Twice Amended) The method according to claim 1 [9], wherein the detection of the hybridization is performed by using a plurality of probe nucleic acids and detecting nucleotide sequence of the sample nucleic acid by comparing the intensity of each hybridization signal obtained from the hybridization of the [labeled] sample nucleic acid and the plurality of probe nucleic acids, said each hybridization signal being represented by the presence of said fluorescent substance after hybridization.

13. (Twice Amended) A test kit for detecting hybridization between a probe nucleic acid and a sample nucleic acid comprising a target sequence complementary to that of the probe nucleic acid according to the method of claim 1, which test kit comprises at least a double-

stranded DNA-binding protein having a function to stabilize a complementary double-stranded DNA.